PACKAGING FOR CONTAINING AND DISPENSING

This Application is a Divisional of U.S. Patent Application 09/414,565, filed September This invention relates to the art of dispensing wire and, more particularly to a package for 4, 2001, as a Palest No. 6,648,141. containing and dispensing large quantities of a continuous wire without tangling.

INCORPORATION BY REFERENCE

The present invention relates to feeding large quantities of a continuous wire from a container to a welding operation wherein the wire must be fed to the welding operation without tangling or interruption. Such containers are known in the art and are generally shown and described in Cooper 5,277,314; Cooper 5,819,934; Chung 5,746,380; Kawasaki 4,869,367 and Gelmetti 5,494,160. These patents are incorporated by reference herein as background information illustrating packages for containing and dispensing large quantities of wire. Further, these patents illustrate the importance of controlling the wire as it is being dispensed from the package to prevent tangling.

Seufer 5,816,466 illustrates the interaction between the wire package and the wire feeder which is a part of the welding apparatus and is incorporated by reference herein as background information.

BACKGROUND OF THE INVENTION

15

10

5

The present invention is particularly applicable for use in connection with welding wire and, therefore, the invention will be described with particular reference to a package containing a large quantity of welding wire stored therein as a coil containing many convolutions formed into layers. However, the invention has broader applications and may be used with any type of wire or other wire-like materials.

20

25

It is, of course, well known that welding is an effective method of joining metal components. Further, it is well known that utilizing a welding wire as a consumable electrode in the welding process enhances the weld. Accordingly, it is desirous to package welding wire so that it can be cost effectively utilized. Furthermore, welding applications wherein large quantities of welding wire are consumed necessitate welding wire packages which contain large quantities of a continuous welding

wire. Accordingly, large welding wire packages have been created for these applications which